

$$3. \quad \frac{\left(4 - \frac{12}{2x-3}\right)(2x-3)}{\left(5 + \frac{15}{2x-3}\right)(2x-3)} = \frac{4(2x-3) - 12}{5(2x-3) + 15}$$

$$\frac{1}{x+h} - \frac{1}{x}$$

$$\frac{x}{(x+h)(x)} - \frac{x+h}{(x+h)(x)}$$

$$\frac{-h}{(x+h)(x)}$$

$$\frac{2}{3} + \frac{4}{5}$$

$$\frac{\cancel{2} \cdot 5}{3 \cdot 5} + \frac{4 \cdot 3}{3 \cdot 5}$$

$$(4a^{5/2})^{3/2}$$
$$4^{3/2} a^{5/2}$$

$$\frac{15x^2}{5x^{1/2}}$$
$$3x^{3/2}$$

$$\sqrt[3]{x^2}$$
$$x^{2/3}$$

$$f(x) = \frac{x^3}{2} \quad g(x) = \sqrt[3]{2x}$$
$$\frac{(\sqrt[3]{2x})^3}{2} = \frac{2x}{2} = x$$